

-- 20. A valve assembly for use with a prosthetic limb having a prosthetic limb socket shaped for receiving a patient's residual limb, the socket having a socket wall, a socket interior, a proximal opening, and a distal end, the valve assembly comprising:

a base having a first surface and a second surface, adapted to be fitted within the socket interior at the distal end of the socket such that said first surface faces the socket interior and such that said second surface faces the socket wall, said base including a channel extending therethrough providing fluid communication between said first surface and said second surface;

a first attachment mechanism, carried on said base, adapted to releasably attach an upright assembly to the distal end of the socket when said base is fitted within the socket interior at the distal end of the socket;

a valve coupled to said base for controlling the flow of air through said channel.

21. The valve assembly of claim 20, wherein said valve assembly further comprises a seal extending from said base, adapted to provide an air-tight seal between said base and the socket wall when said base is fitted within the socket interior at the distal end of the socket.

22. The valve assembly of claim 21, further comprising:  
a cushion carried on said base, having a proximate end and a distal end, said proximate end being adapted to abut a wearer's residual limb.

23. The valve assembly of claim 22, wherein said cushion is formed from an elastomeric material and said cushion includes said seal.

24. The valve assembly of claim 20, wherein said base includes a second attachment mechanism adapted to releasably attach said base within the socket interior.

25. The valve assembly of claim 24, wherein said first and said second attachment mechanisms include a screw- or bolt-receiving hole extending into said base.

26. The valve assembly of claim 20, wherein said valve includes an open/close port, said open/close port allowing transfer of air through said valve when said open/close port is open.

27. The valve assembly of claim 20, wherein said first attachment mechanism includes a screw- or bolt-receiving hole extending into said base.

28. The valve assembly of claim 27, wherein said screw- or bolt-receiving hole is threaded.

29. A valve assembly for use with a prosthetic limb having a prosthetic limb socket shaped for receiving a patient's residual limb, the socket having a socket wall, a socket interior, a proximal opening, and a distal end, the valve assembly comprising:

a base including a flexible exterior, a chamber therewithin, and at least one channel extending into said chamber, said channel being adapted to provide fluid communication between said chamber and the interior of the socket when said base is fitted within the socket interior at the distal end of the socket;

a duct engaged with said base and in fluid communication with said chamber; and

a valve coupled to said duct for controlling the flow of air therethrough;

whereby said base is adapted to be inserted through the proximal opening and fitted within the socket interior at the distal end of the socket, and said flexible exterior is adapted to abut the socket wall so as to provide an airtight seal between said base and the socket wall when the base is fitted within the socket interior at the distal end of the socket.

30. The valve assembly of claim 29, further comprising an attachment mechanism carried on a distal end of said base, said attachment mechanism being adapted to secure said base within the distal end of a socket and to attach an upright assembly to the distal end of the socket.

31. The valve assembly of claim 30, wherein said attachment mechanism includes a screw- or bolt-receiving hole extending into a distal surface of said base.

32. A prosthetic limb, comprising:  
a prosthetic limb socket shaped for receiving a patient's residual limb, said socket having a socket wall, a socket interior, a proximal opening, and a distal end;  
an upright assembly;  
a base fitted within said socket interior at said distal end of said socket, said base including a channel extending into said base and opening onto said socket interior;  
an attachment mechanism, carried on said base, releasably attaching said upright assembly to said distal end of the socket; and  
a valve coupled to said base for controlling the flow of air through said channel.

33. The prosthetic limb of claim 32, further comprising a substantially annular projection extending from said base and providing an air-tight seal between said base and said socket wall.

34. A prosthetic limb, comprising:  
a prosthetic limb socket shaped for receiving a patient's residual limb, said socket having a socket wall, a socket interior, a proximal opening, and a distal end;  
an upright assembly;  
a base-plate fitted within said socket interior at said distal end of said socket, said base including a channel extending into said base and opening onto said socket interior;  
a valve coupled to said base for controlling the flow of air through said channel;  
and  
a bolt extending from said upright assembly, through said socket wall and into said base-plate;  
whereby said base-plate facilitates the passage of air from said socket interior and also facilitates the coupling of the upright assembly to the socket.

35. The prosthetic limb of claim 34, further comprising an air-tight seal between said base-plate and said socket wall.